

CHAPTER 1

PURPOSE AND NEED



Cienega Creek flows year round through the National Conservation Area.

CHAPTER 1

PURPOSE AND NEED

INTRODUCTION

The Proposed Las Cienegas Resource Management Plan is a complete plan for managing the 49,000 acres of public land, resources, and uses within the Las Cienegas National Conservation Area (NCA) and Sonoita Valley Acquisition Planning District (Map 1-1). Both the NCA and Planning District are within the Empire-Cienega Planning Area boundary (Map 1-2) which was delineated prior to their designation by Congress. This plan differs from traditional BLM plans in several **two important** ways:

- ~~• It combines both the land use plan and activity plan levels of BLM planning in one document.~~
- It was developed through a collaborative public planning process.
- It is designed to use principles of adaptive management.

Through this document we are making land use plan decisions, including desired resource conditions, **resource land use** allocations, and special designations, **and land tenure decisions** for the Las Cienegas National Conservation Area and public lands within the Sonoita Valley Acquisition Planning District. ~~In the same document we are also preparing an interdisciplinary activity plan for these areas. This activity plan implements The land use plan decisions through a set of~~ The management actions in this plan **include many of the actions** traditionally found in the following documents:

- Watershed management plans
- Wildlife habitat management plans

- Cultural resource management plans
- Allotment management plans
- Recreation management plans

The plan is also integrated with a ~~draft~~ **final** environmental impact statement (**FEIS**) that describes the potential environmental impacts of the proposed Las Cienegas Resource Management Plan. We have prepared the proposed RMP and **FEIS** according to the requirements of the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA).

~~We have made every attempt to make the different planning levels in this document as seamless as possible for the reader. But because of the different policies, regulations, and procedures that apply to the two levels of planning, we have decided to differentiate the two levels in Chapter 2, the Description of the Alternatives. In Chapter 2, We have separated the descriptions of the alternatives into two parts. The first part describes the land use plan alternatives **desired resource conditions, resource land use allocations, special designations, and land tenure decisions.** The second part describes the **resource management actions** interdisciplinary activity plans which would be **implemented under** each alternative. Within each alternative, we have arranged the proposed actions by resource topic. We have organized Chapter 4, the analysis of impacts, by affected resource and have described the impacts of **both parts of** each alternative on that resource. Chapter 4 combines the impacts on the affected resources from the two levels of planning.~~

We prepared this plan using several of the outcomes of the Sonoita Valley Planning

Map 1-1

Las Cienegas National Conservation Area and Sonoita Valley Acquisition Planning District

Map 1-2
Empire-Cienega Planning Area Boundary

Chapter 1: Purpose and Need-Background

Partnership (SVPP). The SVPP is a voluntary association of federal, state, and local agencies, organizations, and private citizens who share a common interest in the resources and management of the public lands within the Sonoita Valley, an area that includes the entire upper watershed of Cienega Creek. The following Planning Process section describes in detail the SVPP collaborative process and its outcomes.

The agency preferred alternative is the Proposed Plan (Alternative 2) which is also the alternative preferred by participants in the SVPP. Thus, BLM has given “full consideration to the management alternative preferred by the Sonoita Valley Planning Partnership, as it applies to Federal lands or lands with conservation easements” as stipulated in Las Cienegas NCA Act.

The Las Cienegas Resource Management Plan is one of several ongoing or upcoming planning efforts within the Sonoita Valley. Since we could not attain a broad ecosystem plan that crossed jurisdictional boundaries, the SVPP’s hope is that each planning effort will incorporate the desired conditions for the watershed and develop strategies to achieve them. In this way, we hope to achieve a healthy functional ecosystem.

PURPOSE AND NEED

The Las Cienegas NCA was designated by Congress in December 2000 in order to conserve, protect, and enhance the unique and nationally important aquatic, wildlife, vegetative, archaeological, paleontological, scientific, cave, cultural, historical, recreational, educational, scenic, rangeland and riparian resources and values of the public lands within the NCA (See Appendix 1). The Act establishing the Las Cienegas NCA directed

BLM to prepare a comprehensive management plan for the long-term management of the public lands within the NCA within two years of designation.

The Las Cienegas Resource Management Plan/Environmental Impact Statement has been prepared to guide and implement management for the public lands within the Las Cienegas NCA and Sonoita Valley Acquisition Planning District to ensure that these resources and values are protected and to resolve issues associated with management of the public lands within these areas.

The issues and the planning process are described in more detail in Chapter 1. Chapter 5 provides additional details on the planning process and public input. As specified in the Act, the Proposed Las Cienegas Resource Management Plan has been prepared from a draft of the Empire-Cienega Management Plan, which was in preparation when the NCA was designated, and in accord with the resource goals and objectives developed through the Sonoita Valley Planning Partnership process.

BACKGROUND

In 1988 BLM acquired, through a land exchange, 45,000 acres within the Empire, Cienega, and Rose-tree ranches in northeast Santa Cruz County and southeast Pima County, Arizona. Later exchanges have brought in 4,000 more acres. These lands, which became the Empire-Cienega Resource Conservation Area (RCA), have extremely high social, cultural, and resource values for the local and national public. These values include healthy watersheds, extensive native grasslands, intact riparian systems, endangered and special status species habitats, prehistoric and historic cultural resources, and varied dispersed recreation opportunities.

Over the years since acquisition of the Empire-Cienega RCA, several special designations have been made or proposed for the area because of its significant resources.

- The historic Empire Ranch Headquarters has been proposed for listing on the National Register of Historic Places (The Empire Ranch House is already listed).
- Two segments of Cienega Creek have been proposed to Congress for designation as scenic river segments in the Wild and Scenic Rivers System.
- The American Bird Conservancy has designated the RCA as a continentally important bird area.
- The Appleton-Whittell Area of Critical Environmental Concern (ACEC), designated in the Phoenix Resource Management Plan, has been enlarged and set aside for research.
- Most of the public lands in the RCA (nearly 42,000 acres) have just been designated as the Las Cienegas National Conservation Area. The remainder have been included within the Sonoita Valley Acquisition Planning District (See Map 1-1 and Appendix 1).

While acquiring the public lands within the Empire-Cienega RCA, BLM was completing the Phoenix Resource Management Plan/EIS (BLM 1988) and included in the document interim management guidelines for the area. But it was too late to incorporate and analyze land use planning alternatives for the RCA. As a result, BLM was mandated to develop a land use plan for the acquired public lands within the RCA. The number of special designations and significance of the resources also pointed to the

need to develop a variety of activity-level plans.

After several false starts on developing a land use plan between 1989 and 1994, BLM decided in 1995 to take a new approach that would involve more public participation in all aspects of planning (summarized in Chapter 5). The approach would also improve communication and coordination with surrounding public and private landowners. This desire for a new collaborative approach led to the creation of the Sonoita Valley Planning Partnership, which is discussed in more detail later in this chapter.

SETTING

A unique, scenic area of open, rolling grasslands in a high desert basin, the Sonoita Valley (Map 1-3) lies in the uppermost watersheds of three streams in southeast Arizona: the Babocomari River, Cienega Creek, and Sonoita Creek. To the north spread the grasslands and woodlands of the Las Cienegas National Conservation Area managed by BLM. To the south, east, and west are the woodlands and forests managed by two units of Coronado National Forest.

At the crossroads of two scenic highways within an hour of the rapidly growing Tucson metropolitan area, the Sonoita Valley is surrounded by public lands with outstanding dispersed recreation opportunities, a variety of traditional uses, and significant natural resources, including several endangered species. The valley still retains wide open spaces, rural lifestyles and values, and a great variety of plant communities and wildlife. But at the same time the valley is also vulnerable to the impacts of rapid growth and the intensifying conflicts at the urban-rural interface.

Map 1-3
Area of Interest Sonoita Valley Planning Partnership

Within the Sonoita Valley, the Las Cienegas NCA and Sonoita Valley Acquisition Planning District encompass much of the Upper Cienega Creek watershed, which is important to Tucson for flood control and aquifer recharge. The area also has the following attributes:

- Five of the rarest habitat types in the American Southwest: cienegas, cottonwood-willow riparian areas, sacaton grasslands, mesquite bosques, and semidesert grasslands.
- Habitat for several endangered species.
- A site on the National Register of Historic Places.
- Two proposed wild and scenic river segments.
- Scenic open space.

In addition to Tucson, the area is readily accessible from the nearby towns of Sonoita, Patagonia, Benson, and Sierra Vista. Dirt roads provide access into the area by connecting with State Highways 82 and 83.

PLANNING AREA

The Empire-Cienega Planning Area boundary corresponds to the Empire-Cienega Long-Term Management Area (LTMA) boundary. The LTMA was designed to encompass all public lands within the Empire-Cienega RCA. BLM established the LTMA in the land tenure amendment to the Safford Resource Management Plan while these lands were being administered by the Tucson Resource Area of the Safford District Office. Under an LTMA designation, BLM retains public lands and blocks them up with other land acquisitions or conservation easements acquired from willing sellers. Appendix 2 discusses this plan amendment under the Description of Management Guidance Common To All Alternatives.

The Empire-Cienega Planning Area encompasses 266 mi² (170,558 acres) in southeast Arizona, roughly bounded by Interstate 10 on the north, Arizona State Highway 83 on the west, the Whetstone Mountains on the east, and the Audubon Society's Appleton-Whittell Research Ranch on the south (Map 1-2). Table 1-1 summarizes the acres by ownership within the planning area.

Table 1-1
Land Ownership: Empire-Cienega Planning Area

| Land Ownership | Acres | Percentage |
|------------------|----------------|------------|
| BLM | 48,956 | 28.7 |
| State of Arizona | 80,706 | 47.3 |
| Private | 40,896 | 24 |
| TOTAL: | 170,558 | 100 |

PLANNING PROCESS

THE SONOITA VALLEY PLANNING PARTNERSHIP

The Sonoita Valley Planning Partnership (SVPP) is a voluntary association of federal, state, and local agencies; organized groups; and people who share a common interest in the future of public land resources in the Sonoita Valley. Participants come from a variety of communities in southern Arizona including: Sonoita, Elgin, Patagonia, Huachuca City, Sierra Vista, Nogales, Tucson, and Phoenix. Participants also represent organized groups including: conservation organizations; grazing and mining interests; and hiking, bird-dog, mountain biking, and off-highway vehicle clubs. Agency representation has come from the BLM, Nogales, and Sierra Vista Ranger Districts of Coronado National Forest; Natural Resources Conservation Service; U.S. Geological Survey; Arizona Game and Fish Department; Arizona State Land Department; Pima County Parks and Recreation and Planning/Flood Control; and Santa Cruz County. The partnership is open to all--anyone can participate and join at any time.

The Sonoita Valley Planning Partnership was conceived as a way for the community (private, public, government, local, non-local) to come together to resolve local and national issues affecting public lands in the Sonoita Valley. The partnership has increased awareness, communication, understanding, trust, and support among its members. The partnership has also helped us look at the valley as a whole and determine what we want and need in the future.

ECOSYSTEM PLANNING AND THE COLLABORATIVE APPROACH

The Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA) direct that to the fullest extent possible federal agencies must encourage and facilitate public involvement in decisions that affect the quality of the human environment. Traditionally, BLM and other agencies have involved the public in planning at the initial scoping stage and have then “disappeared” until ready to ask for comments on a draft plan. This process resulted in many people thinking that their comments were ignored and led to a lack of trust in the agencies and outcomes of the process.

In recent years, land use planning has made a major shift toward an ecosystem management approach. Under the ecosystem management approach, planning processes are more open to the public, and the public is involved early in the process. Interested parties are encouraged to help establish goals and determine ways to achieve them. Table 1-2 compares the traditional and ecosystem approaches to land use planning.

The U.S. Interagency Ecosystem Management Task Force in its 1995-1996 report, *The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies*, recommended eight steps in the ecosystem approach. These steps are complementary to the National Environmental Policy Act (NEPA) and guide agencies in implementing and participating in ecosystem efforts:

1. Define the areas of concern or interest.
2. Involve stakeholders.
3. Develop a shared vision of the ecosystem’s desired future conditions.

4. Characterize the historical ecosystem and the present environmental, economic, and social conditions and trends.
5. Establish ecosystem goals.
6. Develop and implement an action for achieving the goals.
7. Monitor conditions and evaluate results.
8. Adapt management according to new information

In 1995 BLM's Tucson Field Office decided to take a new collaborative approach to planning for the Empire-Cienega Planning Area, with full public participation guided by these principles of ecosystem management. This approach resulted in the forming of the Sonoita Valley Planning Partnership (SVPP). This partnership met monthly for four years, focusing at first on developing a shared vision, goals, and specific objectives for the Sonoita Valley. In the last year and a half, the partnership focused on working with BLM to develop alternatives for managing the planning area.

Partnership participants were at first interested in the possibility of developing a broad ecosystem plan for the Sonoita Valley area. But early in the process, they realized that this goal was unattainable, at least in the short term. The focus then shifted to developing desired conditions, goals, and objectives that could be applied to the entire Sonoita Valley and incorporated in different planning efforts as they were undertaken. So far, two planning efforts have incorporated the desired conditions: this Las Cienegas Resource Management Plan and A *Draft Comprehensive Plan for Northeastern Santa Cruz County* prepared by the Sonoita Crossroads Community Forum (2000).

Table 1-2
Comparison of the Traditional and
Ecosystem Planning Approaches to Land
Use Planning

| Traditional Approach | Ecosystem Approach |
|--|---|
| <ul style="list-style-type: none"> Public involvement solicited at selected stages of plan development. Emphasis on consultation. Process based on issues that may lead to increased polarization. Planning boundary based on agency jurisdictional boundary. Traditional management focusing on analysis of conditions at one point-in-time leading to more rigid planning documents. Public involvement generally ends with completion of planning document. | <ul style="list-style-type: none"> Public involved throughout process. Emphasis on collaboration. Process based on developing desired conditions for area (goals and objectives) leading to increased consensus building. Planning boundary based on ecosystem resources and processes and a blurring of jurisdictional boundaries. Emphasis placed on adaptive management. Continued public involvement in plan implementation and monitoring. |

SONOITA VALLEY PLANNING PARTNERSHIP OUTCOMES

To date, the Sonoita Valley Planning Partnership has accomplished the following:

- Raised a variety of issues concerning public lands within the Sonoita Valley including the following:
 - Mineral use and impacts
 - Utility rights-of-way and other land uses
 - Managing off-highway vehicles and road and trail networks
 - Establishing and managing a segment of the Arizona Trail
 - Managing outdoor recreation
 - Managing visual resources
 - Designating areas of critical environmental concern (ACECs)
 - Managing livestock grazing
 - Maintaining water quality and quantity
 - Managing riparian and upland vegetation
 - Managing endangered species and fish and wildlife habitats
 - Managing cultural/historical resources
 - Economics
 - Public education

These issues, combined with those generated in earlier work on the Empire-Cienega planning effort, are described in more detail later in this chapter.

- ❑ Developed Desired Future Conditions for the Sonoita Valley including the following:
 - Vision statements for open space, water, healthy diverse grasslands, and traditional uses for the Sonoita Valley. These statements broadly define desired future conditions to maintain or reach in this valley.
 - Broad goals for vegetation, wildlife, water, watershed, cultural resources, recreation, open space, traditional uses, and stewardship of resources. These goals can be applied to all lands within the Sonoita Valley.
 - Specific, measurable objectives for upland and riparian vegetation, watershed, wildlife, cultural resources, and recreation opportunities. These objectives can be applied to all lands within the Sonoita Valley.

BLM has incorporated these desired future conditions as the foundation for this planning effort. These conditions are described in Chapter 2 before the descriptions of the four plan alternatives.

- ❑ Worked with BLM on developing alternative management strategies for the Empire-Cienega Planning Area. Included were strategies on the following:
 - Mineral development
 - Utility-rights of way

- Off-highway vehicle (OHV) designations
 - Road and trails system
 - Recreation zones and sites
 - Visual resource management (VRM)
 - Areas of critical environmental concern
 - Livestock grazing
 - Fish and wildlife management
 - Vegetation management
 - Cultural resources management
- ☐ Reached consensus on a preferred alternative that they would like to see BLM implement in the Empire-Cienega Planning Area.
- ☐ Provided input on BLM and Forest Service project proposals within the Sonoita Valley.
- ☐ Provided input to Sonoita Crossroads Community Forum for *A Draft Comprehensive Plan for Northeastern Santa Cruz County*.

RELATIONSHIP TO OTHER AGENCY PLANS (WITHIN AND OUTSIDE BLM)

SONOITA CROSSROADS COMMUNITY FORUM

Over the past 10 years the Sonoita Valley, including the unincorporated towns of Elgin and Sonoita, has undergone unprecedented growth as more people have discovered the area's

scenic open spaces, pleasant climate, and recreational opportunities. Many residents descend from families who homesteaded this area and still raise livestock and engage in other traditional rural lifestyles. Many of the newer residents commute to Tucson, Sierra Vista, and Nogales. A diverse group, these residents share a common interest in maintaining the traits that they value in the Sonoita Valley. In March 1996, with the support of the Sonoran Institute, residents established the Sonoita Crossroads Community Forum to discuss local values and work toward resolving the area's many issues relating to rapid growth.

In April 2000, the Sonoita Crossroads Community Forum released *A Draft Comprehensive Plan for Northeastern Santa Cruz County*. This plan includes: policies and strategies for building effective partnerships between the community and land management agencies; maintaining open space and rural character; and promoting quality development, both commercial and residential, at the Sonoita Crossroads. The group's intent is to have its plan adopted as part of the Santa Cruz County Comprehensive Plan.

EMPIRE RANCH FOUNDATION

The Empire Ranch Foundation, a nonprofit corporation, was established in 1997 to improve the public's historic, natural, and recreational resources and educational experience at the Empire Ranch. Initially the Foundation is focusing on securing funding to stabilize and eventually restore the historic Empire Ranch headquarters. As part of this effort, the Foundation is helping develop a phased adaptive use plan (master plan) for the complex. This plan determines public uses of the complex, including interpretive, educational, research, administrative, and program support, at a level compatible with other resource goals.

CORONADO NATIONAL FOREST

The Empire-Cienega Planning Area is bounded on three sides by national forest lands within two units of Coronado National Forest—to the west is the Nogales Ranger District and to the east and south is the Sierra Vista Ranger District. The Coronado National Forest Plan (Forest Service 1986) is the comprehensive land use plan defining management direction for these lands. The intended life of the plan was 10-15 years and the plan is now due for revision.

PLANNING ISSUES

Twelve major planning issues were generated for the Empire-Cienega Planning Area from initial public scoping, the collaborative planning process, and BLM interdisciplinary team members. These issues can be grouped into three categories: (1) desired future conditions, (2) land use allocations, and (3) special designation areas.

Desired future conditions include the following:

- Goals that are generally broad statements of desired outcomes.
- Standards that describe the physical and biological condition or degree of function a resource must meet to sustain ecological processes.
- Objectives that state specific, measurable desired conditions for resources.

Land use allocations include determining allowable uses and broad use levels such as surface lands where certain uses are allowed or excluded.

Special designations are proposed for areas with nationally, regionally, or locally significant resources where special management attention is needed, such as areas of critical environmental concern.

Following the description of each major planning issue are the related implementation issues. BLM would apply laws, regulations, and its public land planning and management guidance in resolving these issues. This management guidance, also known as planning criteria, is summarized in Chapter 2 and described in more detail in Appendix 2.

ISSUES REGARDING DESIRED RESOURCE CONDITIONS

Watershed: Upland, Riparian, and Aquatic Areas

BLM's Fundamentals of Rangeland Health (43 CFR 4180) provide direction for the development of resource objectives and the selection of appropriate management actions to achieve them. The Fundamentals of Rangeland Health include having watersheds that are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components. These fundamentals also encompass the ecological processes of watersheds. These processes include the hydrologic cycle, nutrient cycle, and energy flow that are maintained, or toward whose attainment significant progress must be made, to support healthy biotic populations and communities. BLM Arizona's standards for achieving rangeland health include ensuring proper functioning condition and desired vegetation condition of upland and riparian areas according to sound management practices (guidelines).

Issues Regarding Desired Resource Conditions

Issue 1: What level of resource use within upland areas would be compatible with ensuring maintenance or improvement of desired conditions?

Related implementation issues (watershed/upland):

- a. To what extent should we use fire and other tools or allow natural fires to reduce the spread of exotic or undesirable native plants in the grassland?
- b. How do we ensure fire protection for residents while conducting public land fire management activities?
- c. Accounting for climactic variability (drought) in proposals.
- d. Poor upland management practices in some areas.
- e. Depletion of vegetation in some areas (concentrated use areas).

Issue 2: What level of resource use within riparian (streamside) areas would be compatible with ensuring maintenance or improvement of desired conditions?

Related implementation issues (riparian):

- a. Diversion, consumption, and extraction of water as they relate to maintaining perennial water in creeks.
- b. Impacts on water recharge factors from soil and vegetation conditions.
- c. Ensuring protections for sensitive riparian areas in proposals.

- d. Are there impacts from manure (nonpoint source) on water quality? If so, how do we eliminate or minimize impacts to ensure that we meet quality standards.
- e. Are there problems with sediment load in streams in the planning area and are sediment loads affecting water quality? If so, what measures can we take to reduce impacts?
 - i. High sediment loads in Apache, Fresno, Wood, Gardner, **Mattie Canyon**, and Springwater Canyons are a concern.
 - ii. Mattie Canyon down-cutting from recent flooding may affect upstream portions of Mattie Canyon as well as Cienega Creek downstream from the confluence.

Issue Tracking:

*Chapter 2 (Alternatives): The Land Use Plan section of each alternative prescribes desired condition goals and objectives for watersheds and upland and riparian areas. Common to Alternatives 2, 3, and 4 are specific management actions for achieving and maintaining desired vegetation conditions, including vegetation treatments, control of exotics, and watershed restoration projects. These actions are listed in the ~~Activity Plan~~ **Management Actions** for Alternative 2 and referenced in the other alternatives.*

Chapter 3 (Affected Environment): The watershed, upland vegetation, and riparian vegetation sections describe these resources and their conditions.

Chapter 4 (Impacts): The Impacts to watershed, water quality, upland vegetation, and riparian vegetation sections describe impacts to these resources from each of the alternatives. The relevant sections also describe impacts from

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watershed and upland and riparian vegetation management on other resources and users.

Fish and Wildlife Habitat Management

The Empire-Cienega Planning Area provides habitat for at least 37 special status species, including 11 federally listed or candidate species that need special attention. In addition, the diversity of habitats supports a wide variety of more common game and non-game fish and wildlife species. If not properly managed, other uses of the public lands can damage wildlife habitat. BLM's Fundamentals of Rangeland Health (43 CFR 4180) includes having habitats that have been or are making significant progress toward being restored or maintained for federal threatened and endangered species, federal proposed and candidate species, and other special status species. BLM Arizona's standards for achieving rangeland health include ensuring that productive and diverse upland and riparian-wetland plant communities of native species exist and are maintained.

The Las Cienegas Act of December 2000 directs BLM to include "wildlife management strategies for the Conservation Area, prepared in consultation with appropriate departments of the State of Arizona and using previous studies of the Conservation Area" in this management plan.

Issue 3: How can we maintain healthy native wildlife populations and critical wildlife areas?

Related implementation issues:

- a. Are available natural water sources adequate for wildlife, or do we need to enhance natural waters or develop artificial water sources to maintain and enhance wildlife populations?

- b. What role should the planning area play in the recovery of endangered and extirpated fish, wildlife, and plant species? What priority should we give endangered species recovery?
- c. What management is needed to mitigate adverse impacts to wildlife movements from human development and activities now and in the future?
 - i. Do we need more fence modifications to mitigate impacts on wildlife movements?
 - ii. Do we need seasonal closures or restrictions on roads or other uses to mitigate impacts on wildlife movements?
- d. What are the causes of the low pronghorn reproduction and what management should we consider to improve pronghorn reproductive rates (fawn survival)?
 - i. Do we need to close roads seasonally or restrict other uses?
 - ii. Is vegetation cover adequate for fawning?
 - iii. Are available water sources adequate?
- e. How should we control or manage exotic fish and wildlife to eliminate or minimize harm to native fish and wildlife?
 - i. Bullfrogs in Cienega Creek and ponds in the watershed may harm native fish and aquatic wildlife.
- f. What vegetation cover types and compositions should we manage for within the planning area to benefit wildlife?

- i. Past management practices have changed the condition, aspect, and distribution patterns of vegetation communities from what was historically present.
- ii. Adequate vegetation cover for pronghorn fawning may not be present each year.
- iii. Adequate vegetation cover for grassland sparrows may not be present each year.

Issue Tracking:

*Chapter 2 (Alternatives): The Land Use Plan section of each alternative prescribes desired condition goals and objectives for fish and wildlife as well as land use allocations to support proposals for reintroducing threatened and endangered species. Common to Alternatives 2, 3, and 4 are specific management actions for fish and wildlife, including habitat improvements, control of exotic species, and constraints on grazing and recreation. These actions are listed in the **Activity Plan Management Actions** for Alternative 2 and referenced in the other alternatives.*

Chapter 3 (Affected Environment): The Fish and Wildlife section describes biological diversity and conditions of fish and wildlife habitats (including those of threatened, endangered, and special status species).

*Chapter 4 (Impacts): The Impacts to Fish and Wildlife section describes impacts to fish and wildlife (including threatened, endangered, and special status species) from each of the alternatives. Relevant sections also describe the impacts **from** fish and wildlife management on other resources and users.*

Visual Resources

Crossing the Empire-Cienega Planning Area is State Highway 83, a designated scenic route in the State Highway System. The planning area also provides most of the viewshed from Highways 82 and 83 between the Whetstone and Santa Rita mountains. *A Draft Comprehensive Plan for Northeastern Santa Cruz County*, prepared by the Sonoita Crossroads Community Forum (April 2000), recognized public lands in the planning area in Santa Cruz County as having high visual resource preference values. The planning area has no significant visual intrusions on public lands. Currently there are no designated visual resource management (VRM) classifications, but generally the planning area fits into VRM category II and III (See Appendix 2).

Issue 4: What should be the VRM designation on the public lands within the planning area to maintain visual resource values ?

Issue Tracking:

Chapter 2 (Alternatives): The Land Use Plan section of each alternative prescribes desired conditions for visual resources using Visual Resource Management classes.

Chapter 3 (Affected Environment): The Visual Resources section describes the quality of visual resources in the planning area.

*Chapter 4 (Impacts): The Impacts to Visual Resources section describes impacts to visual resources from each of the alternatives. The relevant sections also describe impacts **from** visual resource management on other resources and users.*

Chapter 1: Planning Issues

Cultural Resources

Dating back more than 7,000 years, the planning area's cultural resources include prehistoric and historic sites. The Empire Ranch House is a National Register site. BLM employs a management system to protect and preserve cultural resources on public land and areas of agency responsibility. The system allows scientific, public, and sociocultural uses specified under legal mandates, acts, regulations, and agency policy.

The Las Cienegas Act of December 2000 directs that BLM shall include “cultural resources management strategies for the Conservation Area, prepared in consultation with appropriate departments of the State of Arizona, with emphasis on the preservation of the resources of the Conservation Area and the interpretive, educational, and long-term scientific uses of these resources, giving priority to the enforcement of the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa et seq.) and the National Historic Preservation Act (16 U.S.C. 470 et seq.) within the Conservation Area” in this management plan.

Issue 5: Which cultural resource properties should be allocated for research, educational, and interpretive uses?

Issue Tracking:

Chapter 2 (Alternatives): The Land Use Plan section of each alternative prescribes desired condition goals and objectives for cultural resources. The activity plan management actions for each alternative prescribe specific management actions for cultural resources, including allocations of sites.

Chapter 3 (Affected Environment): The Cultural Resources section describes the length and evidence of human occupancy in the planning

area and the condition of cultural and paleontological resources.

Chapter 4 (Impacts): The Impacts to Cultural Resources section describes impacts to cultural resources from each of the alternatives. Relevant sections also describe the impacts from cultural resource management on other resources and users.

Economics/Quality of Life

The Sonoita Valley Planning Partnership's vision statement reflects the desire of the diverse participants to maintain the area's rural character. In addition, the Sonoita Crossroads Community Forum states in its community goal for integrating open space in developments that maintaining an open rural character is essential to the community's quality of life, market appeal, and property values. The planning area's public lands significantly contribute to the area's open space character. Management decisions for these lands could affect this character as well as the area's economic development.

Issue 6: What types and levels of resource use and management are compatible with ensuring the maintenance of desired economic and quality-of-life conditions?

Related implementation issues:

- a. How do our actions reflect on the economics of the region, both private and public?
- b. How will growth affect the area and its uses and will growth allow for sustainability of resources?
- c. How will attitudes (expectations, balance, respect, communication, rural versus urban, education) affect the area and its uses?

Issue Tracking:

Chapter 3 (Affected Environment): The Social and Economic Concerns section describes quality/way of life, population and demographics, local and regional economy, employment, and environmental justice.

Chapter 4 (Impacts): The Impacts to Social and Economic Concerns section describes impacts to socioeconomic conditions from each of the alternatives.

ISSUES RELATED TO LAND USE ALLOCATIONS

Mining

All public lands within the planning area are closed to mining except for 458 acres of original public domain and 5,900 acres of federal mineral estate with private or state surface ownership.

The December 2000 act creating Las Cienegas NCA withdraws, subject to valid existing rights, “all Federal lands within the Conservation Area and all lands and interest therein which are hereafter acquired by the United States” from “all forms of entry, appropriation, or disposal under the public land laws and from location, entry, and patent under the mining laws, and from operation of the mineral leasing and geothermal leasing laws and all amendments thereto.”

Issue 7: Should any acquired lands be opened to locatable or leasable mineral development? If mining is not allowed, should public domain lands now open to mining be withdrawn? If mineral development is allowed, should surface occupancy for fluid mineral leases be prohibited in any areas? Should any areas be open to salable mineral disposal?

Related implementation issue:

- How will the opening of any new mine affect watershed health?

Issue Tracking:

Chapter 2 (Alternatives): The Land Use Plan section of each alternative allocates land for mineral development.

Chapter 3 (Affected Environment): The Mineral Development section describes the area’s mineral potential and existing mineral development.

*Chapter 4 (Impacts): The Impacts to Mineral Development section describes impacts to mineral development from each of the alternatives. Relevant sections also describe impacts **from** mineral development on other resources and users.*

Utility Corridors

One use of public lands is for major utility corridors such as power or gas lines. BLM's goal is to ensure that needed utility corridors can be developed without harming significant public resources. Two major utility rights-of-way already cross the planning area. Recently, with the deregulation of the power and communication industries, requests to route electric and fiber optic lines across public lands have dramatically increased. A *Draft Comprehensive Plan for Northeastern Santa Cruz County*, prepared by the Sonoita Crossroads Community Forum (2000), states that “construction of overhead high voltage power lines that do not provide local service is not consistent with the open space and scenic values that attract residents and visitors to our community” and “if a high voltage power line is permitted, its construction should be mitigated through the protection of remaining scenic values.”

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Issue 8: What public land, if any, should BLM designate as utility corridors in the Empire-Cienega Planning Area?

Related implementation issue:

- How will BLM accommodate public landuses such as rights-of-ways for utilities while ensuring that it achieves desired resource conditions?

Issue Tracking:

Chapter 2 (Alternatives): The Land Use Plan section of each alternative allocates land for utility corridors.

Chapter 3 (Affected Environment): The Lands and Realty Actions section describes existing utility rights-of-way and other land use permits.

Chapter 4 (Impacts): The Impacts to Land Use Permits section describes impacts to development of utility corridors and other land use permits from each of the alternatives. Relevant sections describe the impacts from developing utility rights-of-way and issuing land use permits.

Off-Highway Vehicles (OHV)

The use of off-highway vehicles (OHVs) continues to increase on public lands, including those within the Empire-Cienega Planning Area. The interim management guidelines for the area restrict motorized vehicles to designated roads, but BLM has never fully implemented this designation. To help manage rapidly expanding motorized vehicle use, in 1999, BLM developed an access guide (map/brochure) for the area and partially implemented a road numbering system. Both actions were funded by a grant from the Arizona State Park's OHV program. The planning area offers high-quality OHV experiences, but vehicles are increasingly and

illegally traveling off established roadways which damage resources in the process.

Except where needed for administrative purposes or to respond to an emergency, the December 2000 Las Cienegas NCA Act limits the use of motorized vehicles on public lands in the Conservation Area to roads and trails designated for use of motor vehicles in this management plan. BLM is directed to include "provisions designed to ensure that if a road or trail located on public lands within the Conservation Area, or any portion of such a road or trail, is removed, consideration shall be given to providing similar alternative access to the portion of the Conservation Area serviced by such removed road or trail" in the management plan.

Issue 9: What public land should be proposed as open, closed, or limited in some way to motorized vehicles? (OHV designations are usually: 1) open, 2) limited to existing roads, 3) limited to designated roads, or 4) closed.

Related implementation issues:

- a. Vehicles crossing perennial portions of Cienega Creek and associated recreational use are harming fish, wildlife, and riparian areas.
- b. Many duplicate routes for travel to the same locations within the planning area increase the potential for impacts to vegetation, wildlife, and cultural resources.
- c. Throughout the public lands, "wildcat" roads and camp areas created by illegal off-road vehicle use damage resources.

Issue Tracking:

Chapter 2 (Alternatives): The Land Use Plan section of each alternative allocates areas for use by off-highway vehicles. The activity plans

management actions for each alternative describe the designated routes for motorized and non-motorized travel.

Chapter 3 (Affected Environment): The Outdoor Recreation section describes visitor use (including off-highway vehicle use) and access

Chapter 4 (Impacts): The Impacts to Outdoor Recreation section describes impacts to recreation opportunities and access from each of the alternatives. Relevant sections describe the impacts from off-highway vehicle designation on other resources and users.

Recreation Zones

The planning area has a variety of recreation uses, increasing visitor levels, and a high potential for resource conflicts. Recreation zones are designated to maintain or enhance recreation opportunities. These zones can be used to prescribe recreation management across concentrated and dispersed recreation areas.

The Las Cienegas NCA Act of December 2000 states that recreation is allowed to continue in appropriate areas and that, in preparing this management plan, the BLM shall include recreation management strategies, including motorized and nonmotorized dispersed recreation opportunities for the Conservation Area, prepared in consultation with appropriate departments of the State of Arizona. BLM is directed to include “an implementation plan for a continuing program of interpretation and public education about the resources and values of the Conservation Area” in this management plan.

Issue 10: What public land should be proposed for designation as recreation zones for varied recreation opportunities and management strategies?

Related implementation issues:

- a. How should BLM manage recreation to limit harm to fish, wildlife, and vegetation?
 - i. In Oak Tree Canyon, campfires and the parking of vehicles under the trees are harming the oaks.
 - ii. Throughout the public lands, illegal off-road vehicle use is creating “wildcat” roads and camp areas which damage resources (same as issue “c” under off-highway vehicles).
 - iii. Vehicles crossing perennial portions of Cienega Creek and associated recreational use are harming fish, wildlife, and riparian areas (same as issue “a” under off-highway vehicles).
 - iv. Recreation may harm some of the federally listed or other special status species.
- b. How can BLM continue to assure public access?
- c. How can BLM assure the quality of recreational opportunity settings and experiences for a variety of users?
- d. What types of trails and uses should BLM allow and provide?
- e. How will BLM accommodate proposals for the Arizona Trail?
- f. How will BLM educate visitors?
- g. Visitor safety concerns:
 - i. Some people drive their vehicles too fast for road conditions creating hazards for other vehicles, non-motorized users, and livestock.

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- ii. Visitors to existing sites with picnic tables (Empire Gulch and North Canyon) are endangered by branches that could drop from large cottonwoods.
- iii. Signs are not effectively closing hazardous roads with sinkholes adjacent to Cienega Creek (Fall area).

Issue Tracking:

Chapter 2 (Alternatives): The Land Use Plan section of each alternative allocates recreation zones. The activity plans management actions for each alternative describe management within these zones, including designated group sites and camp areas, road maintenance, visitor education, and management of dispersed recreation.

Chapter 3 (Affected Environment): The Outdoor Recreation section describes visitor use (including off-highway vehicle use) and access.

Chapter 4 (Impacts): The Impacts to Outdoor Recreation section describes impacts to recreation opportunities and access from each of the alternatives. Relevant sections also describe impacts from recreation zone designation and management on other resources and users.

Livestock Grazing

BLM has five active grazing leases within the planning area. One of these is covered under the Safford District Resource Management Plan (BLM 1991)/Eastern Arizona Grazing EIS (BLM 1986). The remaining four are on the recently acquired lands within the planning area and need to be addressed in this planning effort. In addition, a sixth grazing allotment has been proposed for BLM-managed lands in the Empire Mountains.

The Sonoita Crossroads Community Forum and participants in the Sonoita Valley Planning Partnership recognized the Sonoita Valley area's ranching heritage as a factor contributing to the area's character. People and groups have also expressed concern about conflicts between livestock grazing and wildlife species and habitats.

The Las Cienegas NCA Act of December 2000 states that livestock grazing is allowed to continue in appropriate areas and that BLM shall "permit grazing subject to all applicable laws, regulations, and Executive orders consistent with the purposes of this Act". BLM is directed to include "production livestock grazing management strategies, prepared in consultation with appropriate departments of the State of Arizona" and "provisions designed to ensure the protection of environmentally sustainable livestock use on appropriate lands within the Conservation Area" in this management plan.

Issue 11: Which areas should be grazed or not grazed? For grazed areas, what level of use is proper for achieving and maintaining desired conditions?

Related implementation issues:

- a. How does livestock grazing affect the ecosystem and does livestock grazing conflict with maintaining and improving vegetation resources?
- b. How do we resolve wildlife-livestock conflicts?
 - i. Adequate cover may not be present for pronghorn fawning and for grassland sparrows each year.
 - ii. Livestock grazing may harm federally listed or other special status species.

Issue Tracking:

*Chapter 2 (Alternatives): the Land Use Plan section of each alternative allocates land for livestock grazing. The ~~activity plans~~ **management actions** for each alternative describe livestock grazing management within each grazing allotment, including grazing system, stocking rate, utilization, and range improvements.*

Chapter 3 (Affected Environment): The Upland Vegetation section describes the current conditions of the range. The Livestock Grazing section describes existing livestock grazing allotments and management.

*Chapter 4 (Impacts): The Impacts **to** Livestock Grazing section describes impacts to livestock grazing operations from each of the alternatives. Relevant sections also describe impacts **from** livestock grazing on other resources and users.*

ISSUES RELATING TO SPECIAL DESIGNATIONS OF PUBLIC LANDS

Areas of Critical Environmental Concern

The planning area contains many resources of special significance. BLM can designate lands as areas of critical environmental concern (ACEC) if they have more than locally significant resources or resource concerns. BLM then prescribes management guidelines for ACECs to protect their special resources. The following are examples of ACECs:

- Areas with significant wildlife, rare plants, or wetlands.

- Areas with significant historical, cultural, or paleontological resources.
- Areas with hazardous conditions.
- Research areas.

BLM has received several proposals for designations of ACECs within the planning area during scoping for this planning effort. Two proposals were for designating Cienega Creek as an ACEC for its riparian values and one proposal was for an ACEC at Nogales Springs for its riparian values. The Sonoita Valley Planning Partnership process proposed designating all the planning area's public lands as an ACEC.

Issue 12: What public land in the Empire-Cienega Planning Area should BLM designate as areas of critical environmental concern (ACECs) or for other special management?

Issue Tracking:

*Chapter 2 (Alternatives): The Land Use Plan section of each alternative proposes designating areas of critical environmental concern (ACEC). The ~~activity plans~~ **management actions** for each alternative describe the ACEC management plans.*

Chapter 3 (Affected Environment): The Special Designations section describes the current special designation areas, including ACECs and wild and scenic river segments.

*Chapter 4 (Impacts): The Impacts **to** Special Designations section describes impacts to existing ACECs and wild and scenic river segments from each of the alternatives. Relevant sections also describe the impacts **from** designating new ACECs on other resources and users.*

ISSUES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

a. Impacts from sewage (point source) on water quality.

Managing sewage is not within the scope of this planning effort. County planning and zoning departments regulate these impacts by issuing building permits and inspecting construction and related infrastructure.

b. Impacts from industrial chemicals (such as cyanide from mining) on water quality.

The Environmental Protection Agency and Arizona Department of Environmental Quality regulate industrial chemicals, including those from mining. BLM would consider these potential impacts in assessing any mining plans of operations.

c. Enforcement: How will use be policed and who will do it (limitation, permits, designated areas, etc.)?

BLM generally has limited law enforcement coverage of public lands. The amount and level of coverage for any area is based on many factors including public safety, sensitivity of resources, level of public use, and workforce and budgetary constraints.

d. How do honeybees and bee-keeping affect the ecosystem?

This question has been placed in the Information Needs section of Chapter 2.

e. What changes in management practices do we need to sustain wildlife populations and still have hunting?

Hunting is regulated by the Arizona Game and Fish Commission, which sets harvest limits in response to an analysis of harvest and population data collected by the Arizona Game and Fish Department (AGFD). BLM and AGFD regularly coordinate on habitat conditions or management practices that may be harming wildlife populations. They then work toward resolving those issues.

f. The planning area needs proactive management to compensate for impacts from surrounding land uses.

This Proposed Las Cienegas Resource Management Plan describes four alternative management strategies that include many proactive strategies to compensate for impacts from surrounding land uses. Some examples include vegetation treatments, control of exotic species invasions, coordination with other agencies or land owners in the watershed, instream flow applications, and recreation zone management.

g. How to plan for the number of uses versus type of use (per capita use) and for increased uses.

This Proposed Las Cienegas Resource Management Plan has included management strategies that consider increased uses and balancing types and levels of resource uses. Two examples are (1) utility corridors, which consider the increasing demands for routing utility lines across public lands, and (2) recreation zones and site management, which consider the increasing number and types of recreation users on the public lands

h. Land Tenure: Should public lands within the planning area be retained? Should more public lands be acquired?

The Land Tenure Amendment to the Safford District RMP (BLM 1994b) analyzed this issue for the public lands within the Empire-Cienega Planning Area. When the Land Tenure Plan Amendment was completed, the Safford Field Office administered the planning area. The plan amendment designated long-term management areas (LTMA) where public lands would be retained and blocked up with other land acquisitions or conservation easements. The Empire-Cienega Planning Area is one of the LTMA designated in the plan amendment. The LTMA designation and management prescriptions are common to all alternatives in the Proposed Las Cienegas Resource Management Plan. Appendix 2 includes a more detailed discussion of this plan amendment under Description of Management Guidance Common To All Alternatives.

The Sonoita Valley Acquisition Planning District (APD) was designated in the Act establishing the Las Cienegas National Conservation Area (NCA) in order to provide for future acquisitions of important conservation land within the Sonoita Valley region of the State of Arizona. The Las Cienegas NCA Act directs that “[t]he Secretary shall negotiate with land owners for the acquisition of lands and interest in lands suitable for Conservation Area expansion that meet the purposes described in section 4(a)” (of the Act). The Secretary shall only acquire property under this Act pursuant to section 7 (of the Act)”. The Act requires that acquisitions of lands or interest in lands be from willing sellers only. BLM has developed an acquisition strategy for lands within the Sonoita Valley

Acquisition Planning District and has incorporated it into the Proposed Plan (Alternative 2) and other action alternatives.

i. Local Growth Issues (Zoning, Business/Commercial Area, Types of Housing, Infrastructure)

These issues relating to private lands and local growth have been addressed by the Sonoita Crossroads Community Forum (2000) in *A Draft Comprehensive Plan for Northeastern Santa Cruz County*.

j. Wilderness

Because the public lands in the planning area were reconveyed from private ownership after the statewide wilderness review was completed for BLM lands in Arizona, potential wilderness values were not inventoried. An initial review was completed for this planning process to determine if the area contains potential wilderness values by applying the size and roadless criteria (> 5000 roadless acres). The existing system of roads was inventoried for transportation planning purposes. The planning area includes a contiguous block of public land over 5000 acres in size, but an extensive system of existing roads crosses public land dividing it into numerous sub-units. Four sub-units greater than 5000 acres were identified, but these are entirely private or State Trust lands, or a combination of both. The largest sub-unit comprised of BLM land is just over 4,000 acres and is bounded on two sides (north and east) by the South Road (EC-900) and on the south by State Highway 82. Since this sub-unit does not meet the size criteria, further wilderness review is not required and wilderness is not an issue analyzed in this EIS.

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k. Rain Valley Allotment (Number 5297)

The Rain Valley grazing allotment consists of 160 acres of BLM land and has one cow year-long (CYL) allocated. The public lands within this grazing allotment are part of the Safford Planning Unit and were included in the Safford RMP and the Eastern Arizona Grazing EIS. The 160 acres were included in the Empire-Cienega Long-Term Management Area which was designated in the Land Tenure amendment to the Safford RMP and therefore were included within the Empire-Cienega planning boundary. These public lands are covered under an existing RMP and already analyzed in an EIS. No specific issues were identified with these lands and no management changes are proposed for this allotment; therefore, it is not being analyzed in this EIS.

l. Cave Resources

The Las Cienegas NCA Act of December 2000 directs that BLM include “cave resources management strategies prepared in compliance with the goals and objectives of the Federal Cave Resources Protection Act of 1988 (16 U.S.C. 4301 et seq.)” in this management plan.

There are no known cave resources within the current boundaries of Las Cienegas NCA. It is possible that acquired lands added to the NCA in the future may have cave resources. If BLM acquires lands with cave resources in the future, then this management plan will be modified or amended as necessary to incorporate appropriate protection measures for those resources.